

a [workpiece] wafer support [mounted] adapted to support a [microelectronic workpiece] wafer in a position [with] within the reactor so that at least [a processed] one surface of the [workpiece] wafer is [being] in contact with [a plating bath] the electrolyte during processing;

the wafer support including at least one electrode [which] that is electrically conductive and capable of receiving and conducting electrical current supplied thereto;

said at least one electrode having a contact face [forming part thereof which] that is adapted to engage a surface of the [microelectronic workpiece] wafer to conduct electrical current [therebetween] thereto;

[wherein] said contact face engaging the surface of the wafer at a portion of the contact face that has been pre-coated with a metal layer that is principally comprised of the metal X [is pre-conditioned by plating onto said contact face a contact face plating layer made from a metal-containing contact face plating material which comprises the same principal metal or metals being plated onto the microelectronic workpiece].

2. (Amended) [A microelectronic workpiece holder] An apparatus as claimed in claim 1 wherein said [contact face plating] pre-coated layer is at least 0.1 microns in thickness.
3. (Amended) [A microelectronic workpiece holder] An apparatus as claimed in claim 1 wherein said [contact face plating] pre-coated layer is formed by electroplating [said contact face plating material onto the contact face].

4. (Amended) [A microelectronic workpiece holder] An apparatus as claimed in claim 1 wherein said [contact face plating] pre-coated layer is formed from [said workpiece plating material] the identical material that is electroplated onto the wafer.
5. (Amended) [A microelectronic workpiece holder] An apparatus for use in [a microelectronic] electroplating [apparatus used to plate] a metal [or metals] onto a [microelectronic workpiece] wafer pursuant to fabricating microelectronic components on the wafer, comprising:
a reactor base adapted to hold an electrolyte that is used to electroplate the metal onto the wafer;
a reactor head assembly including
a [workpiece] wafer support mounted to the reactor head assembly and adapted to support a
wafer for contact with the electrolyte in the reactor base [microelectronic workpiece in position with at least a processed surface of the workpiece being in contact with a plating bath];
at least one electrode [which] that is electrically conductive and capable of receiving and conducting electrical current supplied thereto;
said at least one electrode having a contact face layer forming at least part of said at least one electrode which is adapted to engage the surface of the [microelectronic workpiece] wafer to conduct electrical current [therebetween] thereto;
wherein said contact face layer is made from a metal-containing contact face material [which] that comprises the same principal metal [or metals being] that is to be plated onto the [microelectronic workpiece] wafer.

6. (Amended) [A microelectronic workpiece holder] An apparatus as claimed in claim 5 wherein said contact face layer is at least 0.1 microns in thickness.
7. (Amended) [A microelectronic workpiece holder] An apparatus as claimed in claim 5 wherein said contact face layer is formed by electroplating said contact face material onto the contact face.
8. Canceled.
9. (Amended) A [microelectronic workpiece holder] wafer holding assembly for use in [a microelectronic] an electroplating apparatus used to plate copper onto a [microelectronic workpiece] wafer pursuant to forming microelectronic components thereon, comprising:
a [workpiece] wafer support mounted to support a [microelectronic workpiece in position with] wafer within the electroplating apparatus so that at least [a processed] one surface of the [workpiece being in] may be brought into contact with [a plating bath including a] copper-containing [workpiece plating material] electrolyte;
at least one electrode [which] that is electrically conductive and capable of receiving and conducting electrical current supplied thereto;
said at least one electrode having a contact face [forming part thereof which] that is adapted to engage a surface of the [microelectronic workpiece] wafer to conduct electrical current [therebetween] thereto;
wherein said contact face is pre-conditioned prior to contacting the wafer by electroplating a copper-containing layer thereon using the copper-containing electrolyte. [plating onto

said contact face a contact face plating layer made from a copper-containing contact face plating material.]

10. (Amended) A [microelectronic workpiece holder] wafer holding assembly as claimed in claim 9 wherein said [contact face plating] copper-containing layer is at least 0.1 microns in thickness.

11. Canceled.

12. Canceled.

13. (Amended) A method for plating [one or more metals] a metal onto the surface of a wafer [microelectronic workpiece], comprising:

contacting a surface of the microelectronic workpiece with an electrode [and a contact face forming a part of the electrode, said] having a contact face [being] that is covered by a contact face [plating] layer [, said contact face plating layer being formed from a contact face plating material];

submersing a [processed] surface of the [microelectronic article] wafer into a plating bath [which is used to plate a workpiece plating material including one or more metals onto the microelectronic workpiece];

electroplating [workpiece plating material] a metal from the plating bath onto the [microelectronic workpiece] surface of the wafer by passing electrical current between the [microelectronic workpiece] and the electrode [, said electrical current passing] through the contact face plating layer;

wherein the contact face [plating material includes] layer is formed from the same principal metal [or metals being] that is plated onto the [microelectronic workpiece] wafer.

14. (Amended) A metal as claimed in claim 13 wherein said contact face [plating] layer is formed from [said workpiece plating material] the identical material that is plated onto the wafer.

15. (Canceled in the last amendment).

16. (Amended) A method for plating copper onto the surface of a [microelectronic workpiece] wafer pursuant to forming microelectronic components thereon, comprising:

contacting a surface of the microelectronic workpiece with an electrode at a contact face forming a part of the electrode, said contact face being covered by a contact face plating layer, said contact face plating layer being formed from a metal that is principally comprised of copper [copper-containing contact face plating material];

submersing a [processed] surface of the [microelectronic article] wafer into a plating bath which is used to plate a workpiece plating material [including] that is principally comprised of copper onto the microelectronic workpiece;

electroplating the workpiece plating material onto the [microelectronic workpiece] surface of the wafer by passing electrical current between the [microelectronic workpiece] and the electrode [, said electrical current passing] through the contact face plating layer.

17. A method as claimed in claim 16 [wherein said contact face plating layer is formed from said workpiece plating material] and further including the step of electroplating the contact face

plating layer onto the electrode prior to establishing electrical contact between the electrode and the surface of the wafer.

18. (Canceled in the last amendment)

Please add the following as new claims 19-24.

19. (New) An apparatus for electroplating a metal onto a surface of a wafer pursuant to fabricating microelectronic components on the wafer, the apparatus comprising:

a reactor comprising

a chamber adapted to hold an electrolyte, and

one or more contacts arranged to conduct electroplating power to the wafer through a respective wafer contact portion of each of the one or more contacts;

the reactor including at least first and second modes of operation,

the wafer contact portion of each of the one or more contacts being electroplated with a metal layer using the electrolyte in the first mode of operation, the wafer contact portion being electroplated in the absence of wafer contact,

the wafer contact portion conducting electroplating power to the wafer to electroplate a metal from the electrolyte onto the surface of the wafer in the second mode of operation.

20. (New) The apparatus of claim 19 wherein the electrolyte is used to electroplate a metal that principally comprises copper during the first and second modes of operation.

21. (New) The apparatus of claim 19 wherein the metal layer deposited during the first mode of operation is approximately 0.1 microns thick.
22. (New) A method for electroplating a metal onto a surface of a wafer pursuant to fabricating microelectronic components on the wafer, the method comprising:
- providing a reactor comprising
 - a chamber adapted to hold an electrolyte, and
 - one or more contacts arranged to conduct electroplating power to the wafer through a respective wafer contact portion of each of the one or more contacts;
 - operating the reactor in at least first and second modes of operation,
 - the wafer contact portion of each of the one or more contacts being electroplated with a metal layer using the electrolyte in the first mode of operation, the wafer contact portion being electroplated in the absence of wafer contact,
 - the wafer contact portion conducting electroplating power to the wafer to electroplate a metal from the electrolyte onto the surface of the wafer in the second mode of operation.
23. (New) The method of claim 22 wherein the electrolyte is used to electroplate a metal that principally comprises copper during the first and second modes of operation.
24. (New) The method of claim 22 wherein the reactor is operated to deposit the metal layer during the first mode of operation to a thickness of approximately 0.1 microns.